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ABSTRACT

The purpose of this study is to identify trends in the historical development of inquiry and common elements in models of inquiry; evaluate the extent to which inquiry theory has been incorporated in representative inquiry oriented social studies curriculum project materials; and examine problems in curriculum development for inquiry skills. To identify theoretical trends in inquiry models, the writings of inquiry theorists that are relevant to social studies are analyzed. Considerable overlap among theories is found, and six common elements constituting a general model of inquiry are identified: doubt, clarification, hypothesizing, reasoning, testing, and conclusion. Evaluation of the extent to which new curriculum projects have incorporated inquiry theory and processes is based on three projects: Harvard Social Studies Project/Public Issues Series; Holt Social Studies Curriculum; and the Taba Program in Social Science. Analysis reveals all three projects include components of a general model of inquiry, with the exception of doubt. The curricula vary in the extent to which materials and instructional strategies reflect the inquiry orientation expressed in their rationales. Problems examined in the development of inquiry skills include: failure to accommodate student generated problems; minimal provision for individualization; failure to integrate inquiry components; and failure to demonstrate the relevance of inquiry outside the classroom. (Author/JK)

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Inquiry Theory and Social Studies Curricula: Problems in Planning for Thinking

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The decade of social studies curriculum development activity beginning in the 1960's generated a profusion of materials and expectations for major changes in social studies programs and instruction. Collectively, the outcomes of this activity have been referred to as the new social studies, despite occasional acknowledgement that many of the products and proposals are not, in fact, new.

One of the most salient aspects of the new social studies movement has been its advocacy of inquiry as both content and method. As used here, inquiry refers to a means of obtaining and processing data that involves identifying, examining, and evaluating factual and value alternatives in an effort to resolve a question or reach a decision. Inquiry is intended to provide a rational means of ordering one's own thinking and behavior as well as evaluating others'.

It seems likely that some form of inquiry will remain prominent, at least at the level of advocacy, given its compatibility with citizenship, decision-making, and skill development goals of social studies education. Despite widespread and continuing interest in inquiry,

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however, there have been few investigations of its evolution or specific curricular manifestations.

Although reference to Dewey's conceptualization of reflective thinking is often found in the literature on inquiry, the prevailing tendency is to omit consideration of the contributions of others, creating the impression that each proponent's conception of inquiry is unique. Historical examination of the theoretical antecedents of contemporary inquiry proposals would provide perspective on the present scene and suggest a framework for evaluating the inquiry potential of curriculum project materials.

To date, there appear to be no published studies of the inquiry potential of contemporary social studies curriculum project materials. Analysis of the implementation of inquiry in representative curriculum project materials would provide an indication of the extent to which inquiry theory has been translated into plans for instruction. Greater understanding of some of the difficulties in designing inquiry-promoting curricula would enable future social studies curriculum developers to more effectively provide for the implementation of inquiry and/or encourage realistic modification of expectations.

Recent reviews of teaching methods and social studies instruction have tended to ignore the earlier history and development of inquiry

theory. For example, in his review of general teaching methods, Gage (1963) implied that "the discovery method" is of recent origin by referring only to the literature since 1961 and omitting consideration of this type of "heuristic teaching" in his discussion of the history of teaching methodologies. Similarly, Skretting and Sundeen (1969) noted that inquiry methods are "in vogue," but did not mention inquiry in their brief history of the field of social studies education. While Wallen and Travers' (1963) examination of teaching methods implied that inquiry has neither a philosophical basis nor any significant relationship to learning theories, Metcalf's (1963) review focused on the "reflective theory of method." After acknowledging Dewey as the source and Bayles and Hullfish and Smith as contributors to a theory of reflective thinking, Metcalf cited the work of Griffin (1942) as the only comprehensive application of Dewey's intentions, but did not provide historical perspective or a model of inquiry.

Several studies have explored selected aspects of the development of inquiry oriented methodology. Identifying inquiry as the major feature of the new social studies, Ellis (1971) purported to demonstrate its earlier origins and implementations in an apparent effort to refurbish the image of traditional social studies teaching. However, his conception of inquiry is unclear as he used this term

interchangeably with laboratory method, historical method, and structure. In addition, he included individuals skeptical of the claims of the new social studies among those he repeatedly cited as its leading representatives (e.g., Mark M. Krug).

Johnson (1967) evaluated the philosophical basis and historical development of the problem-solving method in terms of a Christian concept of man, society, and education. She concluded that the method's view of human nature is unacceptably restrictive, suggesting that problem-solving may not be the best method of preserving traditional cultural values.

Matriano (1968) identified common elements and synthesized a model of inquiry from the writings of sixteen "authorities" as a basis for the development of curriculum units. With the exception of Dewey, the individuals selected tend to be associated with the new social studies, and each position was summarized separately without interpretation.

In an effort to relate changes in proposed teaching methods to changing social conditions, Barr (1969) traced the historical development of two approaches to teaching history, traditional (expository) and reform (reflective thinking), from the 1890's to the 1960's. Showing that scientific and technological innovations have resulted

in cultural changes, which in turn have influenced the purposes and methods of teaching history, he concluded that while the traditional position has gradually moved closer to the reform position, the latter remains more appropriate to the needs of contemporary society.

Northup (1971, 1972) identified and explored two reform approaches to social studies education, structure-discovery and reflective inquiry, concluding that

> within the social studies there are clearly two schools of thought. One group wants students to discover a structure of knowledge of a social science or several social sciences, including the techniques of finding and verifying knowledge. The other group wants students to inquire into perceived problems relating to public issues or social problems in order to learn how to make decisions about such value-laden issues (1972, p. 316).

The present study builds on these previous works by extending the examination of inquiry to include the positions of earlier inquiry theorists and the nature of the implementation of inquiry theory in representative contemporary social studies curriculum projects. On the basis of these analyses, some problems in planning for the development of students' reflective thinking skills are considered. Thus, the purpose of this study is to:

1) identify trends in the historical development of inquiry theory and common elements in models of inquiry;

2) evaluate the extent to which inquiry theory has been incorporated in representative inquiry oriented social studies curriculum project materials;

3) examine problems in planning (curriculum development) for thinking (inquiry).

Procedures

To identify theoretical trends and common components in inquiry models, the writings of inquiry theorists that are directly relevant to social studies education were selected for analysis. Included were Dewey (1910), Kilpatrick (1918, 1925), Bode (1921, 1927), Bayles (1950), Bruner (1960, 1961), Hullfish and Smith (1961), Hunt and Metcalf (1955), Massialas and Cox (1966), Fenton (1966, 1967), and Oliver and Shaver (1966).

Representative inquiry oriented social studies curriculum project materials were evaluated in terms of the extent to which they incorporate inquiry theory and processes, specifically the congruence between their inquiry objectives and instructional materials. Thus, evaluation was based on explicit logical contingencies among intended antecedents, transactions, and outcomes (Stake, 1969) pertinent to inquiry. Curriculum intents, as distinguished from what actually occurs, include antecedents (e.g., objectives, materials), proposed transactions (e.g., instructional strategies, patterns of teacher-student interaction), and desired outcomes (e.g., attitudes, behavior).

A focus on logical contingencies among intents is similar to Scriven's (1967) conception of intrinsic evaluation and consistency analysis of curricula.

Thus, the curriculum evaluations consist of (a) an analysis of each project's rationale for evidence of implicit or explicit acceptance or rejection of elements of inquiry theory, (b) a comparison of the project's stated inquiry objectives with the subject matter content, materials, and instructional strategies proposed to implement them, and (c) a summary of the apparent logical contingencies, indicating the curriculum's inquiry potential.

Criteria for selection of the curriculum projects to be analyzed included (a) stated emphasis on implementation of inquiry processes, (b) development of materials for more than one discipline or grade level, (c) commercial availability, and (d) actual use in elementary or secondary schools. Of the projects meeting these criteria, three were selected, representing individual social science disciplines (Holt Social Studies Curriculum) interdisciplinary topics (Taba Program in Social Science), and public issues (Public Issues Series/ Harvard Social Studies Project) — to reflect major directions taken by the new social studies. To facilitate comparison of the curriculum project materials, analysis focused on three units, one from each project, dealing with a common theme: intercultural contact and culture change in the context of immigration to the United States.

On the basis of the curriculum analyses, problems in planning for thinking were identified. Discrepancies between (a) inquiry objectives and (b) content, materials, and instructional strategies were interpreted as indicators of problems in planning for thinking.

Inquiry Theory and Models

Three phases in the history of inquiry are distinguished: origins of contemporary inquiry theory, 1910-1950, beginning with Dewey's How We Think (1910) and including Kilpatrick (1918, 1925), Bode (1921, 1927), and Bayles (1950); inquiry theory in transition, 1950-1965, including Hunt and Metcalf (1955), Bruner (1960, 1961), and Hullfish and Smith (1961); and contemporary inquiry theory, since 1965, including Massialas and Cox (1966), Fenton (1966, 1967), and Oliver and Shaver (1966).

The theoretical antecedents of inquiry as it is espoused in the new social studies can be traced to the work of Dewey, particularly his How We Think (1910). However, interest in inquiry theory has not been continuous as indicated by the publication gap between Bode's Modern Educational Theories (1927) and Bayles' Theory and Practice of Teaching (1950). That inquiry was not prominent during the 1930's and 1940's is suggested by the relative neglect of inquiry in the educational and social studies literature of these decades. For example, neither Horn's Methods of Instruction in the Social Studies (1937) nor Wesley's Teaching the Social Studies (1937) elaborated inquiry theory or methodology. Reviews of educational methods during the 1930's (Hodgkins, 1932; Underwood, [illegible]39) catalogued teaching strategies rather than methods, and Underwood (1939) concluded that an eclectic plateau

had been reached whereon teachers employed different strategies as appropriate to their varied goals for students. It was not until the post World War II reactions to life adjustment and child centered educational theories and practices that inquiry reappeared in the literature.

The models of inquiry proposed during the 1910-1950 period are general in the sense that they are presumed to be applicable to a range of problematic situations. From Bayles, the most recent of the theorists during this period, there are the suggestions that inquiry ought to focus primarily on intrapersonal conflicts and that the process of inquiry might vary slightly according to the specific nature of the object of inquiry. These themes receive greater emphasis and elaboration by later theorists, who, in addition, further specify the components of inquiry.

The period from 1950 to 1965 appears to have been a transitional one in which theories of inquiry were reconsidered and modified. The theorists who have been identified as representative of this transitional period reflect varied perspectives. Hullfish and Smith are educational generalists whose position is closer to that of the earlier 20th century theorists than is the position of Bruner whose background in cognitive psychology. Hunt and Metcalf, while drawing on the work of earlier theorists, focused on inquiry into problematic areas of society and culture.

Although the inquiry models of the transitional theorists evidence less overlap than those of Dewey and his immediate successors, they tend to be divergent rather than contradictory. The explicit suggestion that values might be an appropriate object of inquiry, first put forth by Bayles, was expanded by Hullfish and Smith in their discussion of intrinsic

and instrumental values. Hunt and Metcalf further elaborated value inquiry in the context of conflicting beliefs about social issues. This apparent trend toward inquiry that focuses on values and social issues continued into the contemporary period.

The divergent but largely noncontradictory nature of the inquiry models of the 1950-1965 transitional period also characterizes the contemporary models of inquiry. Since 1965, there have been numerous interpretations of inquiry in a social studies context, though most of the literature is descriptive of particular applications rather than theoretical. Massialas and Cox proposed a general model of inquiry for history and the social sciences, while Fenton proposed a model of historical inquiry, and Oliver and Shaver proposed an interdisciplinary model of inquiry for public issues. Although they worked in the milieu of the emerging new social studies, there are parallels, if not direct links, between their models of inquiry and earlier inquiry positions. In terms of inquiry oriented instruction, historical perspective suggests a renewed rather than a new social studies.

Elements of inquiry shared by two or more of the inquiry models analyzed are shown in Table 1. From this summary, six common elements constituting a general model of inquiry are identifiable:

1) Doubt
2) Clarification
3) Hypothesizing

4) Reasoning

   a) Identification of logical implications

   b) Interpretation of data

5) Testing

   a) Observation, experience

   b) Experiment or

   c) Primary and secondary resources

6) Conclusion

   a) Generalization

   b) Decision

Table One About Here

Earlier general models of inquiry were directed more toward practical and workshop problems where testing typically involves experiment. In comparison, recent inquiry models intended for the social studies place more emphasis on personal and societal problems where reasoning incorporates determination of logical consistency, and testing employs primary and secondary data sources more often than laboratory procedures. In addition, with greater attention to values and value conflicts among more recent theorists, testing is expanded to include justification based on evaluative criteria.

While Dewey distinguished between concrete (practical) and abstract (intellectual) problems, the objects of inquiry proposed by succeeding theorists are more appropriately classified as personal-social and disciplinary or academic, either of which might be concrete or abstract in Dewey's terms. Since 1910, declining emphasis on Dewey's practical problems and Kilpatrick's projects has been paralleled by growing concern with individual and societal problems. Conflict resolution and decision making have become more prominent goals of inquiry. Whereas Dewey viewed inquiry as a means of freeing the individual from cultural constraints, 55 years later Oliver and Shaver conceived of inquiry as a means by which individuals and groups might decide among diverse and often conflicting alternatives.

Following the general models of inquiry of the 1910-1950 period, two divergent lines of inquiry emerged, which can be characterized as academic and social issues inquiry. The former is exemplified by the discipline based, academic inquiry models of Bruner, Fenton, and to a lesser extent, Massialas and Cox. The latter, with its focus on individual and community beliefs and value conflicts, is represented by Hunt and Metcalf and by Oliver and Shaver. Similar distinctions among models of inquiry have been noted by Barth and Shermis (1970), Northup(1971, 1972), and Barr, Barth, and Shermis (1977a, 1977b).

Underlying the theoretical history of inquiry is a belief in the desirability of applying scientific methodology to a broad spectrum of problematic situations. Although the theorists differ in the extent to which they adopted, modified, or supplemented a scientific approach, the influence of modern science is clearly evident in their inquiry models. Social studies inquiry might be viewed as a humanized or socialized version of scientific method intended to accommodate values and value conflicts as well as empirical questions. Inquiry is intended to be both a teaching method and an educational objective, the long range goal being individuals capable of, and desiring to engage in, independent self-sustained learning through inquiry.

Curriculum Project Materials

Evaluation of the extent to which new social studies curriculum projects have incorporated inquiry theory and processes was based on analysis of equivalent units (and accompanying teaching guides) from the three projects selected for examination. These were:

> The Immigrants Experience, Public Issues Series/Harvard Social Studies Project, directed by Donald W. Oliver and Fred M. Newmann, American Education Publications: Columbus, Ohio, 1967.
>
> "The New Immigrants," in A New History of the United States, Holt Social Studies Curriculum, directed by Edwin Fenton, Holt, Rinehart and Winston: New York, 1969.
>
> "Families From Everywhere," in People in Neighborhoods, Taba Program in Social Science, directed by Norman E. Wallen (following the death of Hilda Taba in 1967), Addison-Wesley: Reading, Massachusetts, 1972.

The Public Issues Series consists of unit books with teaching guides and tests. The Immigrant's Experience is intended for use in grades 7-12 as are all the unit books. The Holt Social Studies Curriculum provides a text, audio-visual kit, teacher's guide, and test booklet for each segment in the 9-12 program. A New History of the United States is intended for 11th grade. The Taba Program in Social Science provides separate texts and teacher's editions for grades one through five. People in Neighborhoods is intended for second grade.

The identified logical contingencies among intended antecedents, transactions, and outcomes pertinent to inquiry are presented separately for each project, followed by a summary interpretation of the findings.

Public Issues Series (PI). The rationale and specific objectives of the PI stress the problem clarification and decision making aspects of inquiry more than other elements. Reasoning and testing receive some attention whereas the phases of doubt and hypothesizing are subordinated. Discussion skills are accorded as much or more emphasis than specific inquiry skills, although the two are interrelated, with discussion being the primary vehicle for group inquiry.

The PI's subject matter content, materials, and recommended instructional strategies appear to reflect its stated objectives. For example, in The Immigrant's Experience, students are asked to clarify an issue

twice as often as they are asked to engage in either reasoning or testing. Only three questions in the unit book can be characterized as involving doubt or hypothesizing compared to seven for reasoning and 15 for testing (the latter include eight questions asking for value criteria to justify a decision). Although inquiry is open-ended (neither group consensus nor "right answers" are sought), students are presented with issues and alternatives rather than being encouraged to develop their own problems and hypotheses. Provision of tests of factual information is consistent with the position that students need "the facts of a case" for productive inquiry but seems to conflict with the statement urging teachers not to predetermine the "knowledge or conclusions" students will obtain.

That decisions should be viewed as tentative, subject to modification given new data, is particularly important in the PI in view of the inclusion of relatively limited content. The content sampling is expanded, however, by the suggested activities in the "Review, Reflection, Research" section at the end of each unit book. For example, in The Immigrant's Experience, activities involve students in investigating additional cases (e.g., other ethnic groups, textbook treatments of immigrants).

The major weakness in the PI relates to the long range objective that students employ inquiry independently. While opportunities are provided for practicing various inquiry skills, a systematic sequence of

questions and activities is not evident, making it unlikely that students would perceive a coherent inquiry model that they might apply independent of teacher guidance. For example, although it is stated in The Immigrant's Experience that "the previous cases have taken you through steps in analyzing a persistent public issue (p. 60)," the content and materials, questions, and recommended activities provide opportunities for, but do not necessarily guide students through, an inquiry process. Some phases are stressed while others are neglected, and cases and questions are not directed toward the sequential development and justification of a position. Overall, the PI seems more likely to foster learning about public issues and use of productive discussion and specific inquiry skills, than to promote independent inquiry.

Holt Social Studies Curriculum (HSSC). The rationale and specific objectives of the HSSC stress the problem clarification and hypothesizing aspects of Fenton's historical inquiry model more than other phases of the process. Reasoning, testing, and reaching a conclusion (the proof process) are accorded less emphasis. Students are expected to recognize a problem from data presented by the materials or the teacher rather than encouraged to develop their own problem statements. Despite these varying emphases on specific components of the inquiry process, the long range goal of the HSSC is development of the capacity to engage in independent inquiry and the desire to do so.

While the HSSC's subject matter content, materials, and recommended instructional strategies generally reflect its stated objectives, they seem to violate the spirit of inquiry. The subject matter content stresses analytical concepts conducive to asking questions and formulating hypotheses but does not raise persisting, unresolved questions for meaningful inquiry. The text readings and audio-visual materials provide opportunities for clarification, hypothesizing, reasoning, and testing while the chapter introductions indicate the problems, and the historical essays provide the conclusions for the students.

Consistent with the HSSC's inquiry objectives, the questions and activities in the student materials and teacher's guides emphasize the clarification and hypothesizing elements of the inquiry model. Reasoning and testing are incorporated largely by asking students to analyze others' arguments and determine the adequacy of the evidence presented. However, students are not encouraged to hypothesize freely and reach independent conclusions. They are expected to formulate hypotheses resembling those that scholars would construct in the course of their own inquiry. For example, the Teacher's Guide for A New History of the United States is replete with statements such as:

> Encourage the students to speculate about this question, giving the reasons for any hypotheses they make. The students should recognize that . . ..(p. 169), and
>
> The students should agree that . . .. They should also agree that . . .. They should suggest . . .. The students should summarize the criteria that were decided upon during the day's lesson and write them in their notebooks (p. 29).

In effect, students are directed to inquire about preselected problems and led through a pseudo-inquiry process to predetermined conclusions. While students might learn about historical inquiry and how historians select, investigate, and resolve questions of concern to them, it seems less likely that students completing the HSSC will be motivated and able to engage in independent inquiry when there is no one to tell them what the "problems" are and what their conclusions should be. However, the curriculum's potential for developing specific inquiry skills (e.g., asking questions, evaluating data) seems to be high.

Taba Program in Social Science (TPSS). The rationale and specific objectives of the TPSS incorporate most of the elements of inquiry in the form of cognitive tasks (e.g., developing concepts, developing generalizations), thinking skills (e.g., asking questions, hypothesizing), and related academic skills (e.g., collecting data, interpreting maps). Attitudes favorable to inquiry are also stated as major objectives of the TPSS (e.g., open mindedness, flexibility). The long range goal is development of the capacity for independent inquiry, which the curriculum developers call "autonomous thinking."

Not only are the objectives of the TPSS directly related to specific inquiry processes, but the curriculum as a whole is consistently inquiry oriented. Subject matter content, student and teacher materials, learning activities, and teaching strategies reflect inquiry theory and implement inquiry as both method and goal. History and social science content takes the form of raw data pertinent to significant concepts and generalizations about human experience and behavior. The data are a heterogeneous sampling

drawn from a range of cultures and time periods. Content samples are personalized and presented in a visually appealing manner. Thus, both content and materials are likely to stimulate student interest and support inquiry.

The learning activities and the more specific teaching strategies systematically guide students through inquiry processes without attempting to force them to predetermined conclusions. Students are encouraged to express their own ideas in their own language. However, it is anticipated that the ideas they develop will approximate the curriculum's key concepts and main, organizing, and contributing ideas.

Since problems for inquiry are preselected and employment of an integrated model of inquiry is not intended in the TPSS, students might not attain an awareness of inquiry as a comprehensive process, and, consequently, they might encounter difficulty in pursuing independent inquiry. However, the materials and activities afford students ample opportunities for developing inquiry skills.

In sum, analysis of the implementation of inquiry in new social studies curriculum projects revealed acceptance of the components of a general model of inquiry, with only minor variations in interpretation and emphasis; all three curriculum samples include the previously identified elements of inquiry, with the exception of doubt or problem raising.

While none of the curricula encourage students to raise problems, all three stress clarification of the problems presented in the materials or suggested by teacher questions. Hypothesizing is emphasized in both the

HSSC and the TPSS while it plays a lesser role in the PI. Reasoning, which is stressed in the TPSS, is somewhat less prominent in the PI and subordinated to hypothesis formation in the HSSC. Testing is delegated to a relatively minor place in all three curricula. Independent, individual and group, conclusions are important in the PI (policy decisions) and the TPSS (generalizations) but not in the HSSC.

The PI and the HSSC reflect the divergent directions inquiry theory has taken since 1950, with the PI representing inquiry into personal and societal beliefs and value conflicts, and the HSSC representing discipline based, academic inquiry that does not directly deal with questions of value. Although the TPSS does not employ a comprehensive model of inquiry, the elements of inquiry that are incorporated into the curriculum span both social and academic inquiry.

The curricula vary in the extent to which materials and instructional strategies consistently reflect the inquiry orientation expressed in their rationales and objectives. While none seems very likely, by itself, to help students meet the long range goal -- capacity to engage in independent inquiry -- the PI and the TPSS are more internally consistent than the HSSC, which encourages students to hypothesize but provides them with ready-made conclusions.

Problems in Planning for Thinking

Overall, inquiry theory has had a substantial impact on these new social studies curriculum projects. Components of the process of inquiry have been implemented in their materials and instructional strategies as

well as advocated in their objectives. In contrast, McAulay (1975) reported that an examination of 120 elementary social studies programs produced by individual school districts between 1969 and 1971 revealed that they generally do not reflect an inquiry orientation. He concluded that there appears to be "little evidence that the new social studies has penetrated the hinterland in any shape, form, or size (p. 174)."

Although inquiry seems to have been incorporated to a considerable extent in new social studies curriculum project materials, its curricular manifestations appear somewhat stilted, suggesting problems in planning for thinking. The following exploration of problems in designing inquiry-promoting curricula should not be viewed as an indictment of the curriculum samples, the national curriculum projects generally, or curriculum developers. Instead, the intention is to identify apparent weaknesses and obstacles as a first step toward generating and testing responses that might lead to more effective curricular implementation of inquiry and/or more modest expectations.

In terms of inquiry theory and process, a major weakness of the curriculum samples is their failure to accommodate student-generated problems -- and, to a lesser extent, hypotheses and conclusions -- that do not coincide with those anticipated and/or preferred by the curriculum developers. Such inflexibility represents a serious problem in planning for thinking. Since inquiry is open-ended, curricula intended to promote inquiry should be similarly open and adaptable to diverse student interests and ideas.

A related problem is minimal provision for individualization. For example, not only might an entire group or class of students identify different problems than those presented in the curriculum materials or teacher's guide, but students might differ among themselves as to what is problematic and worth pursuing. Given the single-track, preplanned sequence of most new social studies curricula, such options usually are not possible unless resourceful teachers provide for them.

A third problem is failure to integrate inquiry components. None of the three curriculum samples provides for active student participation in a total inquiry process. While most students need to develop the skills prerequisite to independent inquiry, they also likely need support and practice in putting the pieces together. It seems unrealistic to expect students to make this synthesis on their own. Calling for integration and synthesis does not necessarily preclude flexibility and individualization. Students can be provided opportunities and assistance to systematically inquire about problems that are real for them and to draw their own conclusions.

Two final problems in planning for thinking suggested by the curriculum analyses are failures to (a) provide opportunities for contact with realities beyond the classroom to test hypotheses or apply (act on) conclusions, and (b) demonstrate the relevance of and encourage willingness to engage in inquiry outside the classroom. With respect to the latter, there appears to be a widespread but tenuous assumption that willingness accompanies ability. However, it seems clear that we do not necessarily

like nor do we voluntarily engage in all the activities of which we are capable. It would seem that extending inquiry beyond the classroom and into the community would not only add realism to the process but also demonstrate relevance that might stimulate willingness, if not eagerness, for independent inquiry. Such community based inquiry might be viewed as more applicable to some of the social sciences than others, with history being the least compatible. Although the context of two of the three curriculum samples (PI and HSSC) is primarily historical, the specific topics of immigration, intercultural contact, and culture change certainly lend themselves to using the community as a relevant data source. However, it would be difficult to anticipate and make provisions for diverse local circumstances in curricula developed for a nationwide audience.

Throughout the discussion of problems in planning for thinking, a prominent theme has been the determination and creation of a balance between flexibility/openness and guidance/structuring that is conducive to individual and group inquiry. At least two different types of responses seem to offer possibilities, one focusing on curricular design and the other on packaging. The social studies curriculum projects typically follow a linear design (i.e., prescribe a single sequence of activities and use of materials), which, as has been noted, tends to stifle the spirit if not the process of inquiry. What is suggested instead is a multiple branching design that would provide options at various points, enabling pursuit of divergent lines of inquiry. While more complex and thus more costly to develop than linear curricula, branching designs seem to offer a means of meeting the criteria

of flexibility and structure.

Many of the social studies curriculum project materials are packaged as presumably comprehensive, self-contained, and self-sufficient systems. As described by Davis and Kirby (1970, p. 767), "the package is that contained and its container. The package is also the way it is used." A curriculum package, consisting of a set of interrelated materials with specific plans for their use, is intended to be more than a collection of materials; it is expected to constitute the program for the subject area(s) in the schools where it is adopted. It may be that inquiry is incompatible with such large-scale curriculum packaging. If so, there seem to be at least two options. One is to produce smaller packages, encouraging as well as permitting more flexible use. Suggestions and guidelines for producing relevant local materials also might be incorporated, as suggested by Davis and Kirby (1970).

An alternative is to discard the package altogether, provide multiple and varied resources, and focus on instructional rather than curriculum package development. Emphasizing the interaction among teacher, students, and materials, this approach would place responsibility with individuals, particularly teachers; curriculum materials would be viewed as necessary but not sufficient for implementing inquiry. Consequently, less would be expected or demanded of curricula than has been the case with the new social studies projects. Instead of simply following package directions, teachers would be decision-makers, balancing structure and openness, responding to student interests and selecting (or helping students select)

materials as needed. Underlying this approach is the assumption that inquiry cannot be preplanned, but that teachers can and will effectively foster inquiry given the opportunities, encouragement, and support to do so.

A further consideration relates to the fragmentation of inquiry evidenced in the curriculum samples. Flexibly guided student inquiry might be seen as incompatible with the structure of the academic discipline(s), necessitating controls to preserve the integrity of the subject matter. However, if inquiry is, in fact, a priority, it might be preferable to incorporate content amenable to inquiry instead of attempting to adapt inquiry to preselected content.

Perhaps none of these suggestions is feasible or adequate by itself. Some combination might be more appropriate. For example, inquiry might best be promoted by curricula that are based on small, branching design packages in conjunction with other, varied materials and continuing teacher development. Or, still unknown alternatives might be preferable. In any event, it is hoped that second and later generation social studies curriculum developers will build on the experiences of the 1960's new social studies first generation and their predecessors rather than begin anew as if we had never been there before.

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Table 1

Common Components of Models of Inquiry, 1910 - 1967*

Components of Inquiry	Dewey	Kilpatrick	Bode	Bayles	Hullfish & Smith	Hunt & Metcalf	Bruner	Massialas & Cox	Fenton	Oliver & Shaver
Pre-existing Goal, Belief		X				X				/
Doubt, Difficulty, Problem	X	X	X	X	X	X	/	X	X	X
Suggestion	X						X			/
Clarification	X	X	/	/	/	/	/	X	/	X
Hypothesizing	X	X	X	X	X	X	X	X	X	/
Reasoning:										
Logical Consistency	/				X	X		X		X
Logical Implications	X	X	X	X	X	X	/	X	X	X
Data Interpretation	X	/	X	X	X	X	/	X	X	X
Testing, Justification:										
Observation, Experience	X	X	X	X	X	X	/	X	/	X
Experiment	X	X	X	X	X		/			
Primary & Secondary Resources						X		X	X	X
Evaluative Criteria, Criterion Value				/		X		/		X
Conclusion, Generalization, Application	X	X	/	X	X	X	X	X	X	X

*Only those inquiry components cited or implied by two or more theorists are included: X = explicit citation; / =implied.